

# **Games and Simulations**

### Transaction Costs and Currency: "1808 Road Trip"

Lesson Description: Students are given a "purse" containing one of four types of bank notes and are sent off on an imaginary 1808 journey from Richmond, Virginia to Boston, Massachusetts. The travelers must stop to conduct business in several cities along the way, purchasing food and lodging for themselves and their horses at local inns. Unfortunately, innkeepers in some states accept only the notes issued by a local, well-known bank. Students who successfully complete the journey during the allotted time earn a prize. As they experience the frustration of trying to obtain the notes needed for their purchases, students explore ways to reduce or eliminate this transaction cost. In round 2, the option of exchanging notes with a notebroker is added to the activity. In round 3, students have the option of trading in their money for a the notes of the Bank of the United States, which by 1808 had branches in each of the game's cities, ensuring that the full face value of the notes would be honored.

#### **Content Standards**

**History Standards** (from *National Standards for History* by the National Center for History in the Schools) **Era 3: Revolution and the New Nation (1754-1820s)** 

**Standard 3:** The institutions and practices of government created during the Revolution and how they were revised between 1787 and 1815 to create the foundation of the American political system based on the U.S. Constitution and the Bill of Rights.

3A: The student understands the issues involved in the creation and ratification of the United States Constitution and the new government it established.

Therefore, the student is able to:

• Analyze the factors involved in creating the First Bank of the United States.

**Economics Standards** (from Voluntary National Content Standards in Economics)

**Economics Standard 5:** *Students will understand that:* Voluntary exchange occurs only when all participating parties expect to gain. This is true for trade among individuals or organizations within a nation, and among individuals or organizations in different nations.

• Students will be able to use this knowledge to: Negotiate exchanges, and identify the gains to themselves and others. Compare the benefits and costs of policies that alter trade barriers between nations, such as tariffs and quotas.

**Economics Standard 6:** *Students will understand that:* When individuals, regions, and nations specialize in what they can produce at the lowest cost and then trade with others, both production and consumption increase.

• Students will be able to use this knowledge to: Explain how they can benefit themselves and others by developing special skills and strengths.

Benchmarks, Grade 12: At the completion of grade 12, students will know

2. Transaction costs are costs (other than price) that are associated with the purchase of a good or service. When transaction costs decrease, trade increases.

#### **Teacher Background**

The importance of transaction costs, the "hassle" costs of transacting business, is sometimes overlooked in studying markets. Standing in line, searching for information, making comparisons, trying to get questions answered, negotiating contracting agreements—all are real costs and they have enough of an impact that buyers and sellers in market economies make serious efforts to eliminate them. Another significant transaction cost is one that most people don't encounter in their every day exchanges—the dead weight cost of currency exchange. The wide array of different state bank notes in the Federal Period is a simple, yet telling example of transaction costs in historical markets, and is one that students can readily understand. 1808 Road Trip focuses on the lack of a uniform national currency, one of the many financial problems that prompted the call for the First Bank of the United States in 1791. In 1808 Road Trip, students experience the "hassle" of the inconvenient currency exchanges that hampered trade among citizens of the newly independent states.

The new nation's problems of taxation and defense under the Articles of Confederation and the Constitution were imposing and are well documented in most textbooks, as is the difficulty of establishing trading relationships with former European foes. Less likely to be discussed, however, are the serious obstacles that existed for *domestic* financial dealings and business relationships, as the states built barriers to trade among themselves.

The adoption of the dollar as the official currency of the United States in 1792 (an action that had the somewhat rare support of both Hamilton and Jefferson) did indeed solve some of the old colonial and revolutionary period problems associated with the lack of a common currency. Commodities, Indian wampum, foreign coins of many countries, paper money from various sources (including the now infamous Continentals) all circulated as currency before 1792, creating all sorts of difficulties of exchange and exchange rates. The official adoption of the dollar stopped most of these alternate currencies from being considered legal tender in the U.S. (although Spanish coins would continue to be recognized for some time).

However, the adoption of the dollar as a common currency did not eliminate all the transactions costs in the American monetary system. Money in the U.S. was now *denominated* in one standard unit, but the now-standard dollars were not *issued* by a standard source. So, while the problems of exchange and exchange rates became largely a thing of the past, problems with the acceptance of particular dollar currencies still remained.

The First Bank of the United States was chartered in 1791, and a U.S. Mint was established in 1794; but many of the dollars circulating around the "several States" were issued by various commercial banks. As Gary Walton and Hugh Rockoff note in the *History of the American Economy*:

Although the Constitution forbade the states to issue paper money the states did retain the power to create corporations by special franchise. After the commercial boom beginning in 1793, a large number of banks were established by special franchise. After the commercial boom beginning in 1793, a large number of banks were established by special state charters. These were entirely new institutions on the American scene, for commercial banks had not existed in the colonies. From three banks before 1790, there were 28 banks in 1800 and 88 by 1811. All but two of these were private, state-chartered banks empowered to issue their own paper money.

- ... These bank notes issued by various institutions came to be accepted at widely varying rates. Notes of established, reputable, "specie-paying" banks were taken at their face value that is, at par over wide areas. Bills of other banks were received at discounts ranging from 1 or 2 percent up to 50 percent or more. Distance from the city where the issuing bank was located tended to reduce the acceptability of notes.
- ... In nearly every city there were dealers or brokers who bought and sold bank notes. These note brokers, or "shavers," made profits by exchanging paper that did not circulate at par in a given area for paper that did. The fees they charged were the counterpart of the fees modern banks charge on deposit accounts. Typically, the discounts were small. But the note brokers were frequently castigated by prominent citizens, and dissatisfaction with the currency system was widespread. (pp. 260-1)

Some of these features of the real historical situation are presented in this fictitious 1808 Road Trip up the coast, and some are removed. Innkeepers in the travel cities are instructed to only accept bank notes from their own local area. Enterprising innkeepers may wish to make deals to accept other bank notes below par, and that practice could indeed reflect the historical reality. However, it would add another layer of complication to the game as well as muddle the clarity of the transaction costs around which the game is built (the service charges of the notebrokers). Additionally, note brokers would have an incentive to deal in notes from more than one area if they thought they could sell the notes from other areas to folks in their

home area wishing to travel. The point of the game, though, is to have the students standing in lines over and over again, as well as simulate the reality of having to make transactions in each city along the way.

Contemporary context: Even though the creation of the Federal Reserve in 1913 finally removed, once and for all, the transaction costs reflected in this game, the transaction costs associated with the lack of a common currency are more than just an interesting historical phenomenon. The current events connection to this lesson is the formation of the European Union, the creation of a free trade zone, and the gradual transition to the use of a common currency, the euro. NAFTA and other trial balloons in the western hemisphere—like the proposal in some Latin American countries to "dollarize" their economies—also reflect a desire to reduce the transaction costs that inhibit trade.

#### **Concepts:**

Money Currency exchange Exchange rates Transaction costs

#### **Time Required:** 1 class period

Plus, a LOT of copying and cutting – but the good news is that you only have to do the copying and cutting once, for all – not every time the game is played.

**Teacher's Note**: Each of these banks is a real bank

from the period ... but Merrimack Bank went

bankrupt in 1804.

#### **Materials:**

Prizes for any students who successfully complete the journey. Suggestions include:

- candy
- cans of cold soda
- pencils, stickers, early release passes, extra credit points, free test question answers, homework excuse, etc.

#### l each of the following tent signs

First rounds: Teacher's note: These prices do not reflect actual historic prices. They are set to make the game function in its intended manner. They merely reflect the relative populations of the cities at this time. (NY  $\approx$  60,000,

• New York Inn - \$10

• Philadelphia Inn - \$9

Teacher's note: These prices do not reflect actual historic prices. They are set to make the game function in its intended manner. They merely reflect the relative populations of the cities at this time. (NY  $\approx$  60,000,

Philadelphia  $\approx$  41,000, Baltimore  $\approx$  26,000, and Boston  $\approx$  25,000 at the 1800 census)

Bank notes: (see directions at top of black line masters)

- Bank of Alexandria, Virginia- yellow
- Merrimack Bank, Newburyport, Massachusetts pink
- Bank of Albany, New York blue
- Bank of North America, Philadelphia, PA goldenrod (or other different color)
- Bank of the United States green

Lodging Certificates: (see directions at top of black line masters)

- Baltimore Inn pink
- Philadelphia Inn yellow
- New York Inn blue
- Boston Inn orange or buff (same color as Massachusetts bank notes)

#### Transaction Service Charges sheets:

- One copy for the notebroker
- One copy or overhead to show the class

Trip logs: one for each student – white

Single Hole Puncher – (optional) For teacher to punch trip logs.

#### **Set Up Instructions:**

- 1. Run off and cut apart the lodging certificates, trip logs, and the currency. (See suggestions as to colors and quantity in the headers of the black line masters.)
- 2. Set up the "inns" to one side of the classroom. Use a table large enough to spread out the 4 sets of lodging certificates, but small enough for one or two innkeepers to control. Display the 4 inn signs on the table to show where lines form for those wishing to purchase lodging.
- 3. Distributing money can be time-consuming. To reduce the time necessary —especially if you are not comfortable distributing the money as you explain the directions for the activity—make up the money "purses" ahead and ask a student to quickly hand them out while you give instructions.
  - Make one money packet of \$90 in bank notes for each student.
    - Give only Philadelphia bank notes to 1/4 of the students.
    - Give <u>only</u> Virginia bank notes to 1/4 of the students.
    - Give only New York bank notes to 1/4 of the students.
    - Give only Massachusetts bank notes to 1/4 of the students.
    - Remember that you will need additional currency for the innkeepers to make change and for the note broker(s) to make exchanges, so run off more than is necessary for the original packets. (See copying instructions.)

#### **Procedures:**

- 1. Display the scenario on the overhead and read through with students. Make sure they understand the task and the directions. Deflect questions about how to use bank notes outside their area with answers like, "Oh, You'll figure it out. Let's get started and we'll talk about it if you have problems. Now, are there any more questions about what you have to do to win the prizes?"
- 2. Point out the location of the "inns," and explain that travelers must stand in lines to purchase lodging. Depending on class size, you may want to ask for 1 or 2 student volunteers to be innkeepers. ("Pay" them with the same prize other students must earn by successfully completing the task.) Instruct the innkeepers to situate themselves at the inns where they will find tent signs indicating prices. Make sure that innkeepers have some small denomination bills for change. (See *Set Up Instructions*, above.)
  - Remind the class that these innkeepers will take <u>only</u> the bank notes issued by their local banks. They will not take bank notes drawn on banks from another state.
- 3. Randomly, distribute the \$90 purses and the trip logs to students. (See Set Up Instructions, above.)
- 4. Once the innkeepers are in place, quickly give the class the following instructions:
  - The currency you have in your hand is yours.
  - To earn the prize, you must complete your travel to Boston and back home. There are separate lines for each inn and you may only purchase lodging from one inn in each line. You must purchase lodging in each state in the order of travel, so the only place you may purchase 2 nights' lodging at one time is in Boston. In other words, you may not purchase your return trip lodging on your outbound trip.
  - Each time you purchase lodging, you must get in line to give the lodging certificate to me (the teacher). I will take the lodging certificate, make a tally mark in the proper place on the score sheet, and initial (or hole punch) your trip log in the proper city. You can then go to get the lodging certificate from the next city.
  - Do not belabor the instructions or take questions. The objective is to get the students into the selling round as quickly as possible.
- 5. Announce that the journey has begun.
  - While waiting for the first students to come to turn in their lodging certificates, circulate among the students, listening to their conversations and paying special attention to those who attempt to get a different kind of currency than they started with. If students try to exchange currencies, do not stop them, but do not announce this option or facilitate it.
  - As each student turns in a lodging certificate, mark a tally mark in the proper box on the Progress Chart. If your Progress Chart is a transparency or on a document camera, allow the students to see the progress tally marks as you make them through the round.
  - In this round or in later rounds, you can easily slow the line down and add to the time frustration of the travelers by asking students conversational questions in a loud voice that can be heard by students in line: "So, how did you like Balitmore?" "How's the food in Philadelphia?" "Did you have a pleasant stay in New York?" etc.

• Extend the trading round long enough that students begin to deal with the problem of not having the right currency.

Call time and ask all travelers to return to their seats. Discuss:

- How far did you get? (Post on the board the numbers who got to Virginia, Pennsylvania, New York, Boston and the number of those who weren't even able to get lodging in Virginia.)
- Did anyone earn a prize? Why or why not?
  - Focus on students who were <u>frustrated by not having the currency the innkeeper would accept</u>. Once this problem has been identified, follow-up with questions that help students analyze the nature of the problem.
- Innkeepers: Why wouldn't you take their money?
  - Help the innkeepers go beyond answering that they were instructed not to take another currency. Typically, innkeepers would be busy every day running their inns so they would want only the currency they could easily spend in their own area for the products they purchase everyday. Remind students that money has no intrinsic value; it is valuable only in that it can be exchanged for goods and services. With few exceptions, people aren't eager to have "foreign" currencies.
- Travelers: If you managed to buy lodging in more than one state, how did you do it?
  - Some travelers met with immediate success because they were originally given Virginia currency. Others may have talked a friend into buying Baltimore lodging for them. Some students with Virginia currency might have formed a traveling band, agreeing to pay for others' lodging in Baltimore if their traveling partners pay in the other states. Hopefully, some students tried to exchange currency with someone who wanted theirs. Students who know that "only relative prices matter" would only trade \$8 in Virginia bank notes for \$10 in New York notes or \$9 in Philadelphia notes (since that would be an even trade of one night's lodging in one region for one night's lodging in another region). Don't anticipate, however, that many students will have been successful at this, and don't offer them that insight see if it develops naturally through the game. You can offer the insight later in the game or in the debriefing at the end. The limited time period is prohibitive and serves to heighten the students' frustration.
- Travelers: Why didn't the rest of you do that?
  - Most were probably unsuccessful because of the time limits and the difficulty of searching for someone willing to make a currency exchange.
- What can we do to solve the problem?
  - Students will recognize that people usually anticipate needing a different currency and exchange it ahead of time at a bank or other financial institution. Deflect this solution as impractical for the time period and the game. Students will often suggest a single source of notes. Deflect this solution for now, since that solution is added to the game in Round 3, only after the students have experienced the services of a note broker. When a student suggests some form of official exchange of notes, introduce the idea of the note-brokers described in the historical background.
- 6. Depending on the outcome of the first round, you may choose to designate it a "practice" round. If students were confused about the currencies or didn't realize that they could trade currencies with each other, you may want to "give in" to their complaints and agree to run another round. If you decide to call round 1 a practice round, you will need to restore every student's original \$90 purse. Repeat the debriefing questions after calling time.
- 7. As a result of students' suggestions, "agree" to set up a note-broker that will exchange one currency for another. Be sure to choose a student who can easily handle the task of the notebroker and will take the responsibility seriously. You may pre-choose a student and speak to him/her ahead of time. Remind students that even though one note broker making all the exchanges, in reality there would have been many notebrokers, one in each of the states along the travel route. Students who have travelled to other countries may be familiar with the currency exchange shops found in many places. Also remind them that, in reality, the bankers would have charged a small fee to perform this service.)

8. Announce that you have researched the issue and based on information from the newspaper and from your own observations, as the owner of all 4 banks, you are willing to offer the following exchange rates:

Display the service charges on an overhead transparency of the **Round 2 portion** of the Transactions Service Charges sheet that you will give to the note broker. **Keep the Round 3 portion** (about the BUS notes) **covered.** Make sure that students understand that all transactions must be in units \$10; it keeps the math simple. Also make sure that the students understand that they may only exchange notes for *one* other kind of currency. Remind them that in reality, they would probably be visiting note brokers in *each* city along the way, and the one-kind-of-exchange rule reflects this reality.

To convert bank notes from different regions:	
\$10 from Virginia in exchange for \$10 from Massachusetts:	\$3 service charge
\$10 from Virginia in exchange for \$10 from New York:	\$2 service charge
\$10 from Virginia in exchange for \$10 from Pennsylvania:	\$1 service charge
\$10 from Pennsylvania in exchange for \$10 from Massachusetts:	\$2 service charge
\$10 from Pennsylvania in exchange for \$10 from New York:	\$1 service charge
\$10 from Pennsylvania in exchange for \$10 from Virginia:	\$1 service charge
\$10 from New York in exchange for \$10 from Massachusetts:	\$1 service charge
\$10 from New York in exchange for \$10 from Pennsylvania:	\$1 service charge
\$10 from New York in exchange for \$10 from Virginia:	\$2 service charge
\$10 from Massachusetts in exchange for \$10 from New York:	\$1 service charge
\$10 from Massachusetts in exchange for \$10 from Pennsylvania:	\$2 service charge
\$10 from Massachusetts in exchange for \$10 from Virginia:	\$3 service charge
Note: <u>All</u> note exchanges must be \$10 for \$10.	
Only <u>one</u> kind of note may be exchanged per transaction.	

- 9. To maintain enthusiasm, you might consider offering the prize to anyone who gets TO Boston, and a double prize to any traveler to gets to Boston AND home again by the end of this next round.
- 10. Before opening the next round, remind the innkeeper(s) to accept only their own state bank notes.
- 11. Tell travelers they need not start over. In this round, their journey begins where they ended the last round. Open the round
- 12. Time the round (3-5 minutes). Close the bank, call time, and close the inns. Ask all travelers to return to their seats.

#### 13. **Discuss:**

- How far did you get this time? (*Record numbers who advanced to each state.*) Did anyone earn the prize? Why or why not?
  - Again many students probably did not get what they wanted because of time limitations, standing in line at the bank, etc. If necessary, you can make this more prevalent by deliberately slowing down the pace of bank transactions count out the money, make the student count it back to you, etc.
- Did you use the note broker? Why or why not?
  - Some students may have tired of the line. In addition, some who didn't think of it in the first round might now try to engage in private currency exchanges.
- Did the note broker solve the problem? Why or why not?
  - The bank may have <u>reduced</u> the problem, especially for those at the head of the line, but the problem of having to take the extra time still exists. The notebrokers also created a **new** problem: the transaction cost of the service charge, making the whole trip more expensive.
    - Did the note broker create new problems?

- Some students may realize that their travel is now an even greater drain on their limited resources (their \$90 purse) Some may wonder if they'll have enough money to finish them. Assure them that, as long as they are not wasteful, the game is designed so that \$90 will be sufficient.
- How did you deal with them?
  - Accept a variety of answers. Anticipate attempts to make private exchanges and decisions to take the second choice rather than bear the cost of the line and maybe getting nothing. Don't be surprised if some use time, energy and resources figuring out ways to cheat.
- What, exactly, is the problem?
  - The problem is the hassle involved in getting the right bank notes to purchase lodging.
- Is it possible to solve / eliminate the problem? If so, how? If not, why not?
  - Hopefully, students will suggest all using the same currency. Pursue this possibility by being agreeable and asking, "Which currency?" Students who have in hand the currency they need for the next night's lodging will probably want that to be the common currency. Others will suggest that the best way to solve the problem is with an entirely new currency, one that will uniformly accepted in each region.
- Are there advantages in using one currency over another? Advantages to whom?
  - Presumably, students will want everything to be priced in the currency they are holding, as this involves fewer hassles for them. Some may note that while it's virtually impossible to <u>eliminate</u> transaction costs, they could be <u>reduced</u>. At some point, if the students don't suggest it themselves, propose that you are going to settle the dispute by creating a 5<sup>th</sup> currency that will be acceptable at par in every city on the journey.
- 14. Show students some "Bank of the United States" notes and uncover the Round 3 portion of the Transactions Service Charges sheet.

Round 3

### To convert bank notes from different regions into BUS notes:

\$10 from <u>any</u> region into \$10 of BUS notes

\$1 service charge

- Point out to the students that exchanges can be made for Bank of the United States notes at a uniform \$1 service charge, regardless of the distance from any city to the issuing bank. Tell the students by the time of their fictitious journey, the Bank of the United States (headquartered in Philadelphia) had branches in each of the travel cities.
- 15. Instruct the innkeepers that they may accept **either** the local bank notes **or** Bank of the United States notes. Again, remind them that they still may not accept bank notes from the **other** regions.
- 16. Hold a final travel round.
- 17. End the round and have all students return to their seats.
- 18. Distribute prizes to students who earned them.

#### **Debriefing Questions:**

- A Were there advantages to the customers of using Bank of the United States notes? Explain.
  - The hassle of purchasing was greatly reduced.
  - The lines moved faster.
  - One quick trip to the note broker was sufficient for the rest of the game.
- B Were there advantages to the innkeepers of accepting dollars? Why would they accept dollars but not any of the other state currencies? Explain.
  - More customers were able to make more purchases in a shorter amount of time. An advantage for the innkeeper is the increase in sales brought about by the reduction in the hassles travelers faced in getting the right currency.
  - The BUS notes offered the same advantages as the home notes they were sure that others in the area would accept
    the bills in exchange for goods and services. The innkeepers didn't have that certainty with the currency from other
    states.

- C Transaction costs are the costs involved in making an exchange or transaction. What were some of the transaction costs you encountered in this activity?
  - Lines at inns and notebrokers.
  - Searching out someone to trade currency with.
  - Standing in line to turn in their lodging certificates. Remind the students that **this** line is meant to reflect the travel time between cities. In the time period of the game, travel between the cities was a much bigger cost of **time** than it is today, of course.
- D Are transaction costs included in the price of a night's lodging?
  - No, they are not.
  - Who bears the burden of the transaction costs the traveler (buyer) or the innkeeper (seller)? Who reaps the benefits of the transaction costs the buyer or the seller?
    - Both bear the costs and neither benefits. It may help to understand the nature of transaction costs to note that economists refer to transaction costs as "dead weight" costs, indicating that they confer benefit on neither the buyer nor the seller. The traveler bears the cost of the opportunities lost by standing in line. The innkeeper derives no additional benefit from the traveler standing in line, and in fact, would like to reduce the transaction costs because he is afraid the traveler will go to another inn on his next journey or will bring a tent and sleep on the ground. Because neither buyer nor seller benefits, transaction costs are a dead-weight on the economy.
- E Are transaction costs desirable or should we try to reduce them?
  - Refer back to the discussion of "dead-weight" costs. We should try to reduce transaction costs. Because they inhibit trade, they inhibit the creation of wealth that accompanies trade.
- F Does having a common currency eliminate transaction costs? *No there are other transaction costs besides money exchange.* 
  - What is the impact of a common currency on:
    - transaction costs? (reduced) trade? (increased)
- G What functions were served by the Bank of the United States, under the Constitution, adopting a single currency?
  - The elimination of those transaction costs imposed by the necessity of currency exchange in transactions between individuals and businesses in different states
  - Was this a benefit or a burden to the states and their citizens?
    - A benefit in the increase in trade and consequent increase in wealth.
- H Why might some states have been reluctant to make this change to a common currency?
  - Two important concerns: 1) the loss of sovereignty, a state's power to make its own decisions and put what it perceives to be its best interests first at all times, and 2) concern over the initial exchange rate of that state's currency to dollars.
- Extension question #1: Why is NAFTA, the North American Free Trade Agreement, seemingly unconcerned with reducing transaction costs by converting to a common North American currency?
  - Because the U.S. dollar largely serves that function already, being commonly accepted in both Canada and Mexico.
- Extension question #2: Why is crude oil priced in U.S. dollars throughout the world?
  - OPEC, the Organization of Petroleum Exporting Countries, decreed that it would only transact business in dollars. Oil is used by companies all over the world, and transaction costs for the OPEC nations are greatly reduced by valuing oil in terms of a single currency and making exchanges based on that currency. (In addition, OPEC also reduces the risk of dealing with companies situated in countries with unstable currencies by choosing the American dollar with its history as a stable currency backed by a stable government.)
- Extension Question #3:
  - Use an on-line currency converter or exchange rates listed in the daily paper. Which European currency is currently able to purchase the greatest number of Euros? Which is able to purchase the least?
  - Which currency would you rather be trading for Euros? Why? What factors would influence your answer to this question?

## 1808 Road Trip

You are a lawyer / planter / businessman living in Richmond, Virginia in 1808. News of an excellent business opportunity has come your way. To take advantage of the opportunity, you must journey to Boston to meet with a group of investors.

Carrying letters of credit from your banker and the little cash you've been able to accumulate, you leave home with a servant and two horses. To break up the long journey, you plan to stop for business and to visit relatives or renew old acquaintances in Baltimore, Philadelphia, and New York City on your way to and from Boston.

In each city, you must secure one night's lodging at an Inn. Prices are posted outside the inn and typically include care and food for your horses and servant in the stable.

In Boston, you must stay for 2 days to complete your business discussions.

You are to return home by reversing the route you traveled to Boston—staying one night each in New York City, Philadelphia, and Baltimore.

If you successfully complete the journey before the end of the game, you will receive a prize.

#### Rules:

- You must visit the cities in proper geographical order.
   (No matter what kind of money is in your purse, you start and end in Virginia.)
- Except in Boston, you may purchase only one night's lodging at a time.
- Each time you successfully purchase a night's lodging, you must submit your lodging certificate to me. I will then mark your trip log for the city that matches your lodging certificate, and you can then continue on your way.
- Each round of the game will last only 3-5 minutes. Start each successive round at the inn where you finished the previous round.
- Don't ask me how many rounds are in the game; I won't tell you.
- To earn the prize, you must complete the journey to Boston and back to your Virginia home before the game ends.

# Progress Chart

	Farthest point of journey at end of round: Enter # of travelers						
Round #	Baltimore	Philadelphia					Baltimore
1							

# Transaction Service Charges

Round 2

### To convert bank notes from different regions:

\$10 from Virginia in exchange for \$10 from Massachusetts:	\$3 service charge
\$10 from Virginia in exchange for \$10 from New York:	\$2 service charge
\$10 from Virginia in exchange for \$10 from Pennsylvania:	\$1 service charge
\$10 from Pennsylvania in exchange for \$10 from Massachusetts:	\$2 service charge
\$10 from Pennsylvania in exchange for \$10 from New York:	\$1 service charge
\$10 from Pennsylvania in exchange for \$10 from Virginia:	\$1 service charge
\$10 from New York in exchange for \$10 from Massachusetts:	\$1 service charge
\$10 from New York in exchange for \$10 from Pennsylvania:	\$1 service charge
\$10 from New York in exchange for \$10 from Virginia:	\$2 service charge
\$10 from Massachusetts in exchange for \$10 from New York:	\$1 service charge
\$10 from Massachusetts in exchange for \$10 from Pennsylvania:	\$2 service charge
\$10 from Massachusetts in exchange for \$10 from Virginia:	\$3 service charge

Note: <u>All</u> note exchanges must be \$10 for \$10 (\$20 for \$20, etc).

Only <u>one</u> kind of note may be exchanged per transaction.

Round 3

### To convert bank notes from different regions into BUS notes:

\$10 from any region into \$10 of BUS notes

\$1 service charge









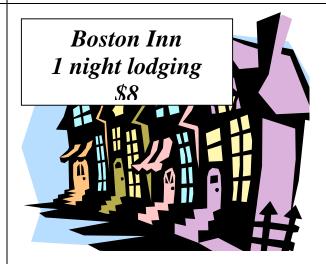


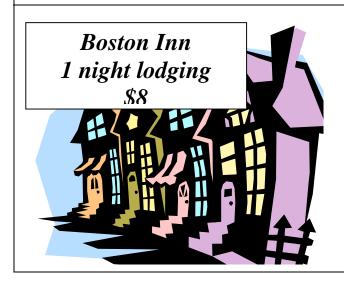




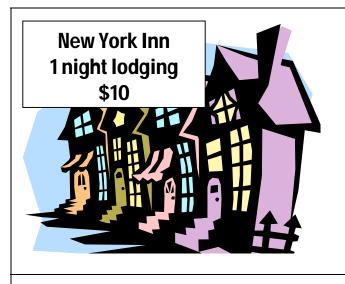


































Copy onto **blue** paper and cut apart **3 sheets** *per student* who will be given a purse consisting of these notes. Make the student's purse with two full sheets, plus \$10 from the third sheet. Pool the remaining money from all the third sheets and distribute to the innkeeper and the notebroker for them to be able to make change. (The innkeeper won't need much.)

Bank of Albany	Bank of Albany
\$10	\$10
New York	New York
Bank of Albany	Bank of Albany
<b>\$5</b>	\$5
New York	New York
Bank of Albany	Bank of Albany
<b>\$5</b>	\$1
New York	New York
Bank of Albany	Bank of Albany
<b>\$1</b>	\$1
New York	New York
Bank of Albany	Bank of Albany
\$1	\$1
New York	New York

Copy onto **goldenrod** paper and cut apart **3 sheets** *per student* who will be given a purse consisting of these notes. Make the student's purse with two full sheets, plus \$10 from the third sheet. Pool the remaining money from all the third sheets and distribute to the innkeeper and the notebroker for them to be able to make change. (The innkeeper won't need much.)

Bank of North America	Bank of North America
\$10	\$10
Philadelphia	Philadelphia
Bank of North America	Bank of North America
<b>\$5</b>	<b>\$5</b>
Philadelphia	Philadelphia
Bank of North America	Bank of North America
<b>\$5</b>	\$1
Philadelphia	Philadelphia
Bank of North America	Bank of North America
\$1	\$1
Philadelphia	Philadelphia
Bank of North America	Bank of North America
\$1	\$1
Philadelphia	Philadelphia

Copy onto **yellow** paper and cut apart **3 sheets** *per student* who will be given a purse consisting of these notes. Make the student's purse with two full sheets, plus \$10 from the third sheet. Pool the remaining money from all the third sheets and distribute to the innkeeper and the notebroker for them to be able to make change. (The innkeeper won't need much.)

Bank of Alexandria Bank of Alexandria \$10 \$10 Bank of Alexandria Bank of Alexandria \/inainia \/inainia Bank of Alexandria Bank of Alexandria Vincinia Vincinia Bank of Alexandria Bank of Alexandria Bank of Alexandria Bank of Alexandria Vincinia

Copy onto **pink** paper and cut apart **3 sheets** *per student* who will be given a purse consisting of these notes. Make the student's purse with two full sheets, plus \$10 from the third sheet. Pool the remaining money from all the third sheets and distribute to the innkeeper and the notebroker for them to be able to make change. (The innkeeper won't need much.)

Merrimack Bank, Newburyport

\$10

Massachusetts

Merrimack Bank, Newburyport

\$5

Massachusetts

Merrimack Bank, Newburyport

\$5

Massachusetts

Merrimack Bank, Newburyport

\$1

Massachusetts

Merrimack Bank, Newburyport

\$1

Massachusetts

Merrimack Bank, Newburyport

\$10

Massachusetts

Merrimack Bank, Newburyport

\$5

Massachusetts

Merrimack Bank, Newburyport

\$1

Massachusetts

Merrimack Bank, Newburyport

\$1

Massachusetts

Merrimack Bank, Newburyport

\$1

Massachusetts

**BANK OF THE** 

\$10

**UNITED STATES** 

**BANK OF THE** 

\$10

**UNITED STATES** 

**BANK OF THE** 

\$5

**UNITED STATES** 

**BANK OF THE** 

\$5

**UNITED STATES** 

**BANK OF THE** 

\$5

**UNITED STATES** 

**BANK OF THE** 

\$1

**UNITED STATES** 

**BANK OF THE** 

\$1

**UNITED STATES** 

**BANK OF THE** 

\$1

**UNITED STATES** 

BANK OF THE

\$1

**UNITED STATES** 

**BANK OF THE** 

\$1

**UNITED STATES** 



# Baltimore Inn \$8



# Boston Inn \$8



# New York Inn \$ 10



# Philadelphia Inn

